

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/501,760  
Applicants : Guenther HAMBITZER, et al.  
Filed : July 19, 2004  
TC/A.U. : 1795  
Examiner : Jonathan Crepeau  
  
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Customer No. : 06449  
Confirmation No. : 1108

**DECLARATION OF Christiane RIPP PURSUANT TO 37 C.F.R. § 1.132**

I, Christiane RIPP, hereby declare and state as follows:

1. I studied chemistry at the University of Karlsruhe and graduated with a diploma in chemistry ("Dipl.-Chem.") in February 1995. From March 1995 to April 1999 I did post-graduate studies and thesis work. I received a Ph.D ("Dr. rer. nat") from the University of Witten/Herdecke (Germany). The scientific experimental work for my thesis was performed at Fraunhofer Institute for Chemical Technology at Pfinztal/Germany. From July 2000 to July 2002 I was employed as chemical scientist at Fortu Bat Batterien GmbH in Pfinztal/Germany. Since then I have worked as a freelance chemist and taken care of my two children.

2. Both during my Ph.D work and during my employment at Fortu Bat, I participated in experimental work with electrochemical battery cells. I am a co-inventor of international patent application PCT/DE 03/00103 and of the corresponding US patent application to which this Declaration refers. Simultaneously with my thesis work I was engaged in related research which was part of a cooperation between the Fraunhofer Institute for Chemical Technology and Fortu Bat. Therefore, I was also involved in the development work of

Fortu Bat on which international patent application PCT/DE 00/00177 and the corresponding US patent 6,709,789 are based.

3. As a freelance chemist I work inter alia for fortu Research GmbH, Karlsruhe, Germany. The CEO of this company is Dr. Günther Hambitzer, inventor and successor in title of the above identified patent and patent application, respectively. As a consultant of this company, I have full access to all documentation concerning the experimental work from which these two patent rights resulted and also of all scientific results that were generated after the initial filing of the patent applications.

4. I have carefully studied the file of the above identified US patent application, including the final office action of November 13, 2008, applicant's reply of February 13, 2009 and the advisory action of February 27, 2009, as well as the prior art cited by the Examiner of the USPTO.

5. One of the issues raised in the advisory action refers to alleged differences between the batteries compared, namely the examples of the Hambitzer '789 patent and the examples of the instant patent application. Based on my personal knowledge, including the written information available about the experiments, I can confirm that exactly the same electrolyte was used in the experiments compared, including not only the same conducting salt  $\text{LiAlCl}_4$  but also in the same concentration ( $\text{LiAlCl}_4 \times 1.5 \text{ SO}_2$ ). Furthermore, the same type of experimental cell was used. Consequently the conditions were identical with the exception of the use of a porous structure consisting of structure forming particles which are not a salt.

6. This corresponds to the aim of those experiments, namely to improve the safety of the battery cells. Clearly, the goal of improving safety is of the utmost importance. In order to

identify the particular factor influencing a given result, it is standard scientific practice to vary only one such factor at a time.

7. In summary, the experiments did confirm that the improvement in safety achieved by the invention is in fact caused by the features of the claim, i.e. use of a porous structure made up of structure forming particles which are not a salt.

8. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: April 8, 2008

Christiane Ripp